

HT-98-034

January 3, 2000

To: Commissioner of Patents and Trademarks
Washington, D.C. 20231

Fr: George O. Saile, Reg. No. 19,572
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Subject:

Serial No. 09/443,447 11/22/99

J.W. Chang, M.M. Chen, B. Dieny,
Cheng Horng, Kochan Ju, Simon Liao

A GMR CONFIGURATION WITH ENHANCED
SPIN FILTERING

Grp. Art Unit: 1773



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INFORMATION DISCLOSURE STATEMENT

Enclosed is Form PTO-1449, Information Disclosure Citation
In An Application.

The following Patents and/or Publications are submitted to
comply with the duty of disclosure under CFR 1.97-1.99 and
37 CFR 1.56. Copies of each document is included herewith.

U.S. Patent 5,780,176 to Iwasaki et al., "Magnetoresistance Effect Element", discloses a MR element with a
exchange coupling film wherein the exchange coupling film is
made of a FM material that improves the lattice matching.

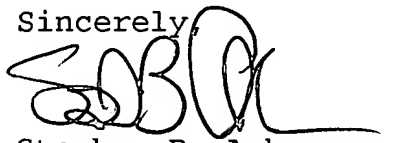
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U.S. Patent 5,843,589 to Hoshiya et al., "Magnetic Layered Material, and Magnetic Sensor and Magnetic Storage/Read System Based Thereon", discloses a MR having a Ta buffer layer.

U.S. Patent 5,766,743 to Fujikata et al., "Magneto-resistance Effect Film, a Method of Manufacturing the Same, and Magnetoresistance Effect Device", discloses a MR with a anti-FM layer on a metal oxide (NiO) layer.

U.S. Patent 5,668,688 to Dykes et al., "Current Perpendicular-to-the-Plane Spin Valve Type Magnetoresistive Transducer", discloses a SV with a TA layer under the Free layer.

Sincerely,



Stephen B. Ackerman,
Reg. No. 37661